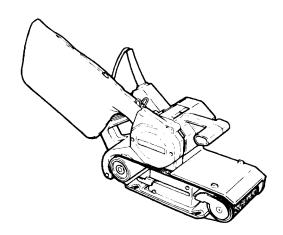
HITACHI

BELT SANDER
BANDSCHLEIFER
PONCEUSE À BANDE
LEVIGATRICE A NASTRO
BANDSCHUURMACHINE
LIJADORA DE BANDA

SB10T • SB10V



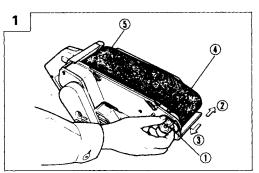
Read through carefully and understand these instructions before use. Diese Anleitung vor Benutzung des Werkzeugs sorgfältig durchlesen und verstehen Lire soigneusement et bien assimiler ces instructions avant usage. Prima dell'uso leggere attentamente e comprendere queste istruzioni. Deze gebruiksaanwijzing s.v.p. voor gebruik zorgvuldig doorlezen. Leer cuidadosamente y comprender estas instrucciones antes del uso.

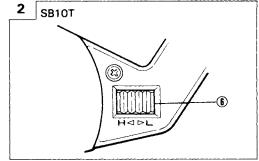


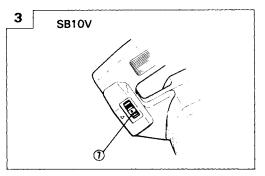
Handling instructions
Bedienungsanleitung
Mode d'emploi
Istruzioni per l'uso
Gebruiksaanwijzing
Instrucciones de manejo

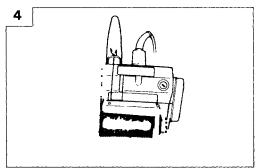
	English	Deutsch	Français
1	Knob nut	Drehknopf	Ecrou à tête ronde
2	Outside	Außen	Côté extérieur
3	Inside	Innen	Côté extérieur
4	Sanding belt	Schleifband	Courroie de ponçage
(5)	Drive pulley	Riemenscheibe	Poulie d'entraînement
6	Slide switch	Schiebeschalter	Curseur
7	Dial	Drehscheibe	Cadran
8	Cord	Kabel	Fil
9	Lever	Hebel	Levier
10	Idle pulley	Leerlaufriemenscheibe	Poulie de tension
1	Shoe plate	Schuhplatte	Plaque de base
12	Rotational direction	Drehrichtung	Direction de rotation
13	Projection of lever	Hebelvorsprung	Surplomb du levier
14)	Wear limit	Verschleißgrenze	Limitde d'usure
(15)	No. of carbon brush	Nr. der Kohlebürste	No. de balai en carbone

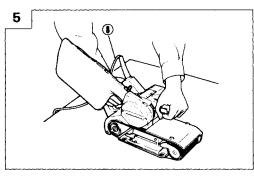
	Italiano	Nederlands	Español
1	Dado della manopola	Stelmoer	Tuerca de perilla
2	Esterno	Naar buiten	Cara exterior
3)	Interno	Naar binnen	Cara inteior
4)	Nastro abrasivo	Schuurband	Banda de esmerilado
5)	Puleggia	Aandrijfrol	Polea de tracción
6	Interruttore scorrevole	Schuifschakelaar	Interruptor deslizable
7)	Selettore	Wijzer	Dial
8)	Cavo	Snoer	Cable
9)	Leva	Hendel	Palanca
0	Puleggia folle	Losse rol	Polea no traccionada
0	Piastra d'appoggio	Sleepschoen	Zapata
2)	Senso di rotazione	Draairichting	Dirección rotacional
3	Sporgenza della leva	Uitstekende deel van de hendel	Saliente de la palanca
4)	Limite di usura	Slijtagegrens	Límite de uso
5)	N. delle spazzole di carbone	Nr. van de koolborstel	No. de escobilla de carbón

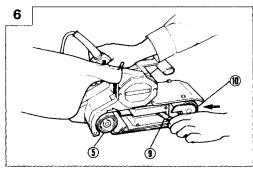


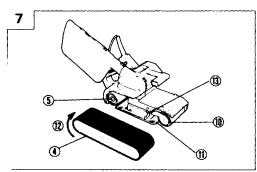


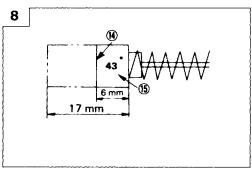






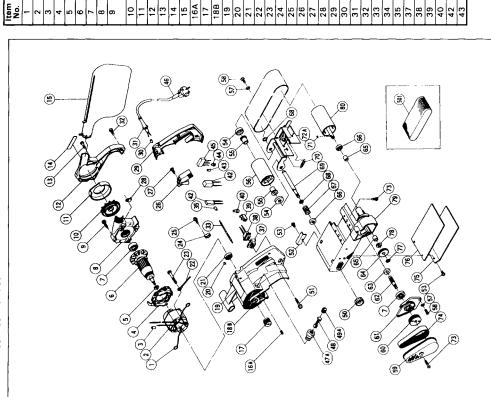






The exploded assembly drawing should be used only for authorized service facilities.

SB10T



Part Name	Item No.	Part
Brush Terminal	44	Terminal
Stator Ass'y	45	Noise Suppresso
Tube (D)	46	Cord
Fan Guide	47A	Brush Holder
Bearing Washer (B)	48	Carbon Brush
Armature	49A	Brush Cap
Ball Bearing (6200VVCMPS2S)	20	Knob Nut
Inner Cover	51	Tapping Screw (W
Trapping Screw (W/Sp. Washer)	25	Striking Guide
US × 30	53	Machine Screw
Dust Fall	24	Washer
Dust Gover	22	
Machine Screw M4×25	26	Idle Pulley Ass'y
	27	
Dust Bac	28	Machine Screw
How Cocket Set Server	n n	Belt Cover
Sucket Set Screw (VIS	09	Pulley (B)
(C) Yello	9	Gear Cover
Housing Ass y	62	Pinion
Name riale	63	Metal
Bearing Lock	64	Gear
Ball Bearing (629VVMCZEPSZL)	65	Metal
nal Wire	99	Washer
Hex. Hd. Tapping Screw D5×55	67	
d	89	Retaining Ring Fo
Tapping Screw (W/Flange) D4×16	69	Shaft
	20	
lapping screw D4×12	7.	Feather Key
12	72A	
Tariale Cover	73	Tapping Screw
lube (b)	74	Belt
nor	75	Shoe Plate
lapping Screw D4×25	16	
Internal Wire	7.7	Retaining Ring Fo
Internal Wire	78	Washer (B)
	79	Body Ass'y
Slide Switch Cover	8	Drive Pulley
	501	Sanding Belt 100
Pillar Terminal	4	
Connector	Parts ar	Parts are subject to possible

D10×14×12

ing For D12 Shaft

 $3 \times 3 \times 8$ D4×16

ew (W/Washer) D4×25

Part Name

ressor

M4×10

M4×14

Washer

The drawing and the list are parts structural drawing and parts list of model SB10T. For model SB10V refer to the drawing and the list. rarts are subject to possible modification without notice due to improvements.

Diode or Control Circuit

Tube (D)

WA80

elt 100×160

ing For D10 Shaft

GENERAL OPERATIONAL PRECAUTIONS

- Keep work area clean. Cluttered areas and benches invite injuries.
- Consider work area environment. Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit.

Don't use tool in presence of flammable liquids or gases.

Power tools produce sparks during operation. They also spark when switching ON/OFF. Never use power tools in dangerous sites containing lacquer, paint, benzine, thinner, gasoline, gases, adhesive agents, and other materials which are combustible or explosive.

- Guard against electric shock. Prevent body contact with grounded surfaces. For example; pipes, radiators, ranges, refrigerator enclosures.
- Keep children away. Do not let visitors contact tool or extension cord. All visitors should be kept away from work area.
- Store idle tools. When not in use, tools should be stored in dry and high or locked-up place-out of reach of children.
- Don't force tool. It will do the job better and safer at the rate for which it was intended.
- 7. Use right tool. Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended -for example -don't use circular saw for cutting tree limbs or logs.
- Dress properly. Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and non-skid footwear are recommended when working outdoors. Wear protective hair covering to contain long hair.
- Use eye protection. Also use face or dust mask if cutting operation is dusty.
- Don't abuse cord. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
- Secure work. Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
- Don't overreach. Keep proper footing and balance at all times.
- 13. Maintain tools with care. Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged, have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
- grease.
 14. Disconnect tools. When not in use, before servicing, and when changing accessories, such as blades, bits. cutters.
- 15. Remove adjusting keys and wrenches. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- Avoid unintentional starting. Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
- Outdoor use extension cords. When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
- Stay alert. Watch what you are doing. Use common sense. Do not operate tool when you are tired.
- 19. Check damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A

- guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.
- 20. Use the power tools only for applications specified in the Handling Instructions.
- To avoid personal injury, use only the accessories or attachment recommended in these handling instructions or in the HITACHI catalog.
- Let only the authorized service facility do the repairing.
- The manufacturer will not be responsible for any damages or injuries caused by repair by unauthorized persons or by mishandling of the tool.
- To ensure the designed operational integrity of power tools, do not remove installed covers or screws.
- 24. Do not touch movable parts or accessories unless the power source has been disconnected.
- 25. Use your tool at lower input than specified on the nameplate; otherwise, the finish may be spoiled and working efficiency reduced by motor overload.
- 26. Do not wipe plastic parts with solvent. Solvents such as gasoline, thinner, benzine, carbon tetrachloride, alcohol, ammonia and oil containing chloric annex may damage and crack plastic parts. Do not wipe them with such solvent. Wipe plastic parts with a soft cloth lightly dampened with soapy water.
- 27. Use only original HITACHI replacement parts.
- Disassemble this tool only for replacement of carbon brushes.
- 29. Use the exploded assembly drawing on this handling instructions only for authorized servicing.

English

SPECIFICATIONS

Model	SB	10T	SB10V	
Voltage (by areas)*	(110V, 115	5V, 120V, 127V, 220V,	230V, 240V) \sim	
Input	950W*			
	High speed	Low speed	420 240 / :-	
No-load belt speed	420m/min	350m/min	420 - 240m/min	
Sanding Belt Size	100 x 610mm **			
Weight (without cord)	5.3kg			

- * Be sure to check the nameplate on product as it is subject to change by areas.
- ** 100 x 620mm sanding belts can also be attached.

STANDARD ACCESSORIES

- (1) Endless Sanding Belt...... 1

OPTIONAL ACCESSORIES sold separately

1. Endless Sanding Belts

Table 1.

Grain size	Grain type
40	AA, WA, CC
60	AA, WA, CC
80	AA, WA, CC
100	AA, WA, CC
120	AA, WA, CC
150	AA, WA, CC
180	AA, WA, CC
240	AA, WA, CC

Note:

The endless sanding belt is sold in packages of 10 belts of the same type. When ordering, specify the grain type and grain size desired.

2. Stationary Stand

When sanding small articles, use a stationary stand for convenience.

3. Sanding Frame

When evenly sanding wide areas, use a sanding frame for convenience. If used together with a stationary stand, even small articles can be evenly sanded.

Optional accessories are subject to change without notice.

APPLICATIONS

Finish sanding and finish flooring of woodwork products.

- O Base polishing of wood-coated surfaces.
- O Finish sanding of metal surfaces.
- Base polishing of metal-coated surfaces, dust removal, or paint removal prior to refinishing.
 - Surface finishing of slate, concrete, and similar materials.

PRIOR TO OPERATION

1. Power source

Ensure that the power source to be utilized conforms to the power requirements specified on the product nameplate.

2. Power switch

Ensure that the power switch is in the OFF position. If the plug is connected to a power receptacle while the power switch is in the ON position, the power tool will start operating immediately, which could cause a serious accident.

3. Extension cord

When the work area is removed from the power source, use an extension cord of sufficient thickness and rated capacity. The extension cord should be kept as short as practicable.

4. Attach the sanding belt.

For details, refer to the section on "Sanding Belt Assembly"

PRACTICAL OPERATING PROCEDURES

1. Adjusting the Sanding Belt position:

Push the switch and turn the sanding belt to the check position. As shown in Fig. 1, turn the knob nut to the left or right and adjust so that the position of the sanding belt edges and the drive pulley edges become almost the same. If the sanding belt is positioned too far to the inside during operation, it may cause abrasion and damage to the machine. If sanding belt moves during operation, adjustment can be made while in operation.

2. Switching the Sander ON and OFF

By pulling the trigger and pushing the stopper, the switch will remain ON even when the trigger is released, promoting continuous, efficient operation. By pulling the trigger again, the stopper is released and the switch is turned OFF.

CAUTION

Never turn the power switch ON when the sander is contacting the surface to be sanded. This is necessary to preclude damage to the material. The same applies when switching the power OFF.

3. How to hold the Sander:

Grasping the handle with one hand and the knob with the other, hold the machine so that it lightly contacts the surface to be sanded. The weight of the machine itself is sufficient for sanding and polishing at highest efficiency.

CAUTIONS

- DO NOT apply additional pressure to the sander. Additional pressure will overload the motor, shorten the service life of the sanding belt, and lower sanding or polishing efficiency.
- In the case of SB10V, do not apply pressure to the unit with the dial set to position 1 or 2.
- 4. How to move the Sander:

For optimum operating efficiency, alternately move the sander forward and backward at a constant speed and balance.

5. Selecting the proper Sanding Belt:

Select a sanding belt of proper grain size and type by refering to **Tables 2** and **3** below.

Table 2

Desired finish	Proper grain size
Coarse finish	40
Medium finish	40 – 100
Fine finish	100-240

Table 3

Grain type	Surface to be worked on	
AA	Steel, Wood	
WA	Wood, Bamboo	
СС	Nonferrous metals, Slate, Plastics, Concrete	

CAUTIONS

- O For grain size and type matching, refer to Table 1.
- Sanding belt grain should be coarser than sandpaper used for manual work.
- Use sanding belts of same grain size until uniform surface is obtained. Changing grain size may result in poor finish.

6. Changing the Sanding Belt speed: SB10T

Either high-speed or low-speed operation can be selected according to the materials and operating conditions. As shown in Fig.2, selection of sanding belt operating speed can be achieved by shifting the tumbler switch to the desired position. Position symbols are as shown in Table 4.

Table 4

Symbol	Speed
Н	High-speed
L	Low-speed

SB10V

As shown in Fig.3, any desired belt speed can be steplessly selected by turning the speed adjustment dial. Dial position 1 is for minimum speed and position 5 for maximum speed.

Please use a belt speed which is suitable for the purpose.

CAUTION

O Do not apply pressure to the unit with the dial set to position 1 or 2.

7. Corner working:

Corners can be sanded and polished by using the machine as shown in Fig.4.

CAUTIONS

- Be careful that loose fitting work clothes do not become caught and drawn into the sanding belt and pulleys.
- DO NOT put the sander down until the sanding belts has come to a complete stop. It is dangerous for the operation of the machine itself.
- During operation, the cord must trail to the left side as seen from behind the machine, as shown in Fig.5. If the cord is to the right side, it could interfere with the sanding belt, damaging the cord and cause a serious accident.

SANDING BELT ASSEMBLY

1. Attaching the Sanding Belt:

- As shown in Fig.6, push down and pull the lever and the idle pulley will move backward, toward the drive pulley.
- (2) Place the sanding belt on the drive pulley and idle pulley, passing it over the outside of the shoe plate, and ensure that the arrow on the inside of the belt coincides with the rotational direction of the drive pulley. (Fig.7)

CAUTION

Installing the sanding belt in the wrong direction will result in lower work efficiency and shorten the life of the sanding belt.

- (3) Push the lever with a finger, and the idle pulley will move forward and place proper tension on the sanding belt. Be careful not to pinch your finger with the lever.
 - Push the lever so that its projection goes in as far as possible.
- (4) Adjust the sanding belt position as described in the Practical Operating Procedures.

2. Removing the Sanding Belt:

Pull the lever as described above. The idle pulley will move backward, releasing tension on the sanding belt, and the sanding belt can be easily removed from the pulleys.

DUST REMOVAL

When an excessive amount of dust accumulates in the dust bag, dust collecting efficiency decreases sharply. To ensure optimum dust collecting efficiency, as well as working efficiency, empty the dust bag when it becomes filled to approximately 2/3 of its capacity. The bag can be emptied as follows:

English

- Loosen the support bar and remove the dust bag from the machine.
- (2) Open the dust bag by unzipping the slide fastener.

MAINTENANCE AND INSPECTION

1. Inspecting the Sanding Belt:

Since continued use of a worn-out sanding belt will degrade efficiency, replace the sanding belt as soon as excessive abrasion is noted.

2. Inspecting the mounting screws:

Regularly inspect all mounting screws and ensure that they are properly tightened. Should any of the screws be loose, retighten them immediately. Failure to do so could result in serious hazard.

3. Inspecting the carbon brushes (Fig.8)

The motor employs carbon brushes which are consumable parts. Since an excessively worn carbon brush can result in motor trouble, replace the carbon brush with a new one having the same carbon brush No. shown in the figure when it becomes worn to or near the "wear limit". In addition, always keep carbon brushes clean and ensure that they slide freely within the brush holders.

4. Replacing a carbon brush:

Disassemble the brush cap with a minus-head screwdriver. The carbon brush can then be easily removed.

5. Maintenance of the motor

The motor unit winding is the very "heart" of the power tool. Exercise due care to ensure the winding does not become damaged and/or wet with oil or water.

NOTE

Due to HITACHI's continuing program of research and development, the specifications herein are subject to change without prior notice.

This appliance is produced to conform to the requirements of B.S. 800: 1977.

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 This requirement is applicable to appliances for the United Kingdom.

IMPORTANT

Correct connection of the plug

The wires of the main lead are coloured in accordance with the following code:

Blue: -Neutral

Brown: -Live

As the colours of the wires in the main lead of this tool may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire coloured blue must be connected to the terminal marked with the letter N or coloured black.

The wire coloured brown must be connected to the terminal marked with the letter L or coloured red. Neither core must be connected to the earth terminal. **NOTE**

This requirement is provided according to BRITISH STANDARD 2769: 1984.

Therefore, the letter code and colour code may not be applicable to other markets except The United Kingdom.

The noise emitted by this power tool is measured in accordance with IEC 59 (CO) 11, IEC 704, DIN 45 635, Part 21, NFS 31-031 (84/537/EEC for concrete breakers). The sound pressure level at the workplace can exceed 85 dB (A); in this case noise protection for the operator is required.